N.B.—The numbers in brackets refer to the numbers on the packets sent to me by Mr. Evans.

Racial and Subspecific Names.

By T. A. CHAPMAN, M.D., F.E.S.

Mr. Wheeler (Ent. Rec., vol. xxx., p. 145) brings against me a friendly accusation of reasoning in the most unsound way he can imagine. This might be simply answered by observing that he heads his protest "Varietal and Aberrational Nomenclature." My statement had no reference to varietal and aberrational nomenclature at all, but was an attempt to specify a point or two bearing on whether a form was or was not a subspecies.

One has to use words that are not definitely accepted by every one in the same sense. For present purposes I use "race" or "subspecies" for the inhabitants of two different areas, if they can be distinguished, and assert that such two "races" or "subspecies" can only conveniently be discussed by giving them names. The race inhabiting the locality from which the type of the species comes, retains the type name, which is also that of any race indistinguishable from it.

A "variety" is a form occurring with the type race, or any where else, in fair numbers suggesting that it is usual for the species to vary in this way. An "aberration" differs from a variety in being comparatively rare and unusual, and suggestive of probably having a pathological cause. The line of demarcation between "variety" and "aberration" may not always be easy to draw. I wish distinctly to object to the word "variety" being used as synonymous with "race" or "subspecies." Any race of a species may present many varieties and many aberrations, but the names of these varieties and aberrations would be the same wherever they occurred.

This, I think, explains my attitude, though it might be obscured by my trying too briefly to express such parts of it as referred to

Coccinella 11 punctata subsp. boreoliteralis.

I incline to think that Mr. Wheeler's extraordinary misapprehension of my views is due to his using the word "variety" (var.) as equivalent to "race" or "subspecies," and he uses "aberration" (ab.) in the sense in which I use "variety." His usage is consonant with that of Staudinger.

Mr. Wheeler appears to have misunderstood what I intended to convey. To suggest that it would result in an increase of varietal and aberrational names is a gratuitous inversion of my meaning. I should certainly like to see the torrent of varietal and aberrational names stemmed. One cannot help fearing that they often arise from commercial motives and even sometimes a little personal vanity.

I desire to extend somewhat further than they do, the recognition of subspecies or races that Lord Rothschild and Dr. Jordan have shown us to be necessary. They postulate, if I recollect aright, that subspecies (or geographical races) should be completely segregated from the other branches of the species in some geographical way.

I think a subspecies is a subspecies whether its geographical separation be complete or not, even if there be no very stringent separation at all. Of course, geographical separation is almost conclusive proof that the separated race is a subspecies, and if this be so, then it seems unnecessary to find any varietal differences, though as a matter of fact, such differences practically always exist where races are so separated. The real proof that geographical races are subspecies, or that any two different races of a species are subspecies, is not to be found in their segregation, or in the amount of their differences, but in the circumstance, that these differences have a permanence under any disturbance as of habitat, etc., that makes some approach to the permanence under such disturbance of a species. That this can rarely be ascertained makes it necessary that we should observe a doubtful attitude in most cases, admitting that we are unable to decide in either way, unless so strong a fact as geographical separation obtains.

To understand the nature and causes of such local races, to find out whether they be subspecies or no, *i.e.*, whether under disturbance they retain their racial characteristics, or in a limited time revert to some other ordinary form of the species, is at least as important a question as any relating to varieties, and consequently if they have to be discussed in any case, the necessity of recognising them without a description, which Mr. Wheeler accepts as the criterion of the neces-

sity for a name, is at least as great as in the case of varieties.

Mr. Wheeler's contemptuous reference to the numbers and proportions of different forms in any race must arise from not understanding my statement. I don't want to meddle with varietal or aberrational names in any way, but I again assert that two races of a species differ in a subspecific manner and possibly (until it is proved or disproved by experiment) to a subspecific extent, even if the only difference between them is that the varieties of which they are composed occur in decidedly different proportions in the two races. A composite photograph of either race would differ appreciably from that of the other.

The diagram (and corresponding text) in Rothschild's and Jordan's Sphingidae, p. xxxv., precisely asserts my proposition in pointing out that subspecies may differ from each other merely in the proportions of the varieties of which they consist, which I take it is, nevertheless, the item of unsound reason that is beyond Mr. Wheeler's imagination. In passing, I may note that they drop any very definite use of the word "variety," making it cover all variation. They use "subspecies" in the sense I adopt, and form for what I call a variety.

There is much to be said for this attitude, considering the am-

biguity that varied usage has attached to the word "variety."

Syngrapha, to take one of Mr. Wheeler's illustrations, is practically absent in most races of coridon, an aberration in many, in the Charente Inférieure it is a very predominant variety. This race, therefore, deserves a name, but the name syngrapha is not interfered with in any

way.

The racial name includes both varietal and non-varietal forms of the race, but does not interfere with the varietal names. The illustration drawn from Lycaena arion by Mr. Wheeler may serve to explain the position. I know something of the life-history of L. arion, but of its subspecies, varieties, and aberrations, I know very little, therefore I deal with the matter somewhat hypothetically. Mr. Wheeler mentions ligarica as a racial form, i.e., as a subspecies, but he implies also that it is the name of what I call a variety. If ligarica is a subspecies,

that name covers the dominant variety and any variations and aberrations therefrom. Are we to say that the variety (aberration, Wh.) ligurica is the most abundant form in the subspecies ligurica? It may be convenient to leave it at that, till we have to discuss the matter with scientific accuracy, then we must have a name for the race different from that of the variety of which it largely consists. The type form may be a variety (aberration?) of the race ligurica, but when it so occurs, its racial name is none the less ligurica. It should be observed, however, that the type aberration here is an aberration of the race ligurica and not of the variety (aberration) ligurica.

We should have

L. arion subsp. ligurica var. ligurica.

In the first line of which *ligarica* is used in two senses, which cannot be defended.

I think Rothschild and Jordan fell into this error.

My whole point is to claim for races of species a really more important position than varieties are entitled to. The chief interest of varieties and aberrations (beyond the commercial and collector's view)

is that they are valuable data in the study of races.

[I am sorry to have misunderstood Dr. Chapman's meaning, but my "misapprehension" cannot be justly described as "extraordinary," since every entomologist with whom I have had any conversation on the subject understood Dr. Chapman's remarks in exactly the same way as I did. I certainly use "variety" (when I use the word at all) as the exact equivalent of "local race," as I believe almost everyone else does; at any rate the practice is so usual that anyone using the word in any other sense cannot expect to be understood unless he clearly defines the sense in which he uses it. It would no doubt be a clear gain if everyone would agree to use the word in Dr. Chapman's sense, for it expresses something for which we have at present no recognised formula, but I fear such use of the word could now only promote further misunderstandings. The "unsound reasoning" of which I complained was the apparent statement that the same name could not be used for a variety (local race) and an aberration, when as a matter of fact the same form constantly occurs in both characters. With regard to the practical inconveniences arising from Dr. Chapman's present explanation, I can only say that as far as I see at present, they seem to be almost as great as they would have been if he had meant what I supposed. I will try to work this out in detail later, the process is too long for a mere note.—George Wheeler.]

A Fortnight in the New Forest in July. By H. DONISTHORPE, F.Z.S., F.E.S.

On July 16th I went down to the New Forest for a much needed rest and change, putting up at the Beaulieu Road Hotel, where I stayed until the 31st. Although on the whole the weather was bad, only one day was too wet to go out at all, and I much enjoyed being in the Forest once more; not having been there since July, 1914. Not being strong enough for much strenuous collecting, I took things very quietly, not straying far afield, though I managed to lose myself twice, a thing I had not done in all the years I have been to the Forest,